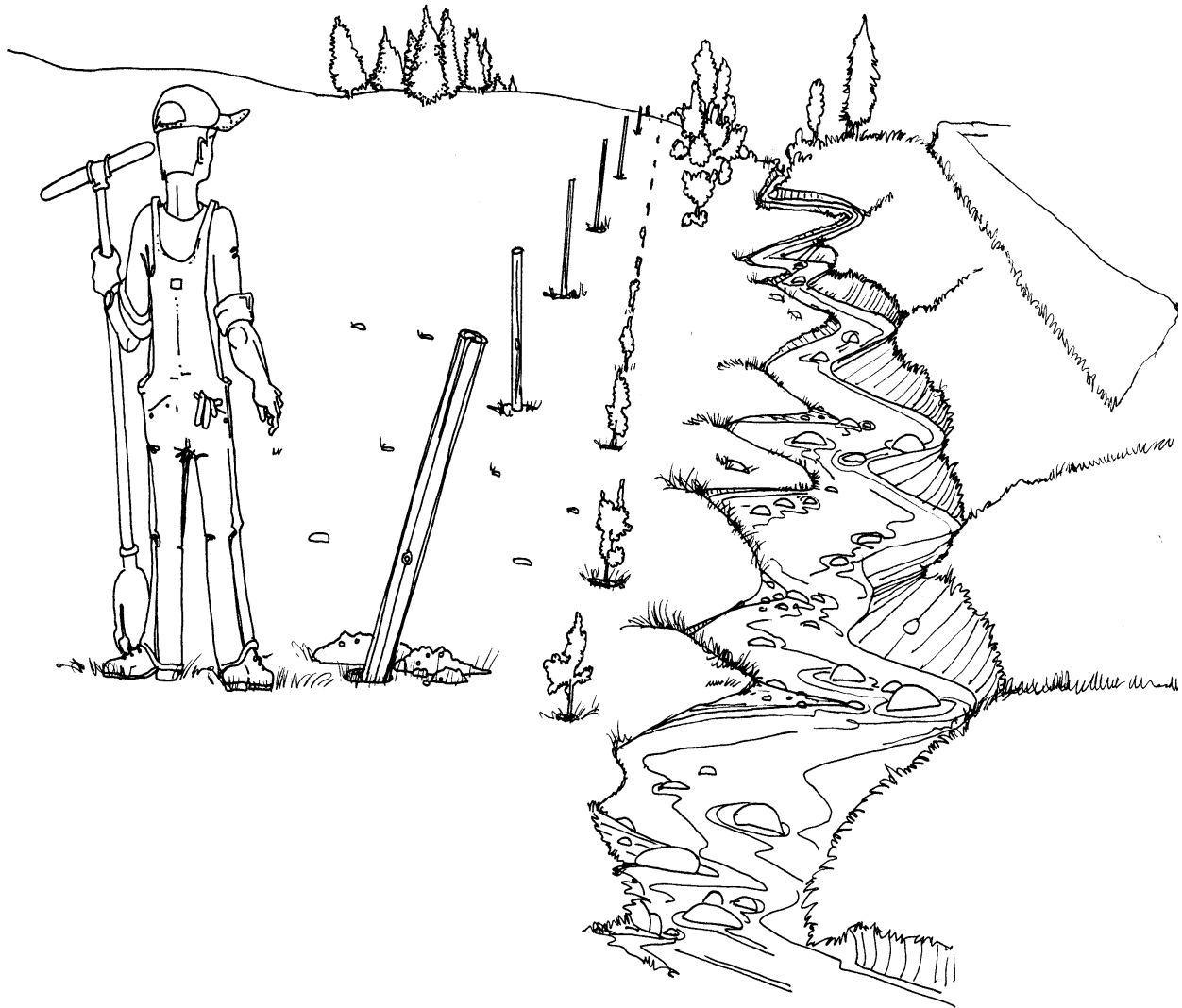


NORTH DAKOTA NONPOINT SOURCE POLLUTION MANAGEMENT PROGRAM PLAN



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I. INTRODUCTION

Nonpoint source pollution control provisions were included in Section 319 of the reauthorized Clean Water Act in 1987. The State of North Dakota submitted and received approval of its first Nonpoint Source Pollution Management Plan in late 1988. The original plan has been amended periodically, most recently in September 1993.

Recently, EPA and states responsible for managing nonpoint source (NPS) pollution developed a new approach to further strengthen state NPS pollution management programs. The new approach builds upon the environmental protection afforded by the yearly national nonpoint source grant program, and significantly reduces Federally-imposed administrative requirements. EPA and state agencies responsible for managing nonpoint source pollution have agreed on a number of important changes to the national guidance EPA uses to support state NPS pollution management under Section 319 of the Clean Water Act. As a result of the new guidance, each state is encouraged to review its NPS Pollution Management Program Plan and revise it as needed to ensure the Program achieves nine key program elements. A state which incorporates all nine key elements and has a proven track record of effective implementation of its Program will be formally recognized as a Nonpoint Source Enhanced Benefits State. Nonpoint Source Enhanced Benefits States will be afforded substantially reduced oversight and maximum flexibility to implement their state programs to achieve their water quality objectives.

This document, which is a product of North Dakota's review of its NPS Pollution Management Program Plan, includes all the necessary revisions to address the nine key program elements. More importantly, it provides a direction for the State NPS Program in the future. The state feels the NPS Pollution Management Program should be an integral part of any watershed management plan. It should promote basin-wide water management, management of water at the source, and management by incentive rather than regulation. Nonpoint source pollution management can be a significant part of the solution to water resource management throughout the state.

Because this document proposes a vision of how the state's NPS Program will operate in the future, it is formatted similar to the way an NPS project implementation plan would be formatted. After a brief history of the progress of the existing NPS Program, the major components of the NPS Program are presented in six individual sections. A summary of these sections is as follows:

- * Resource Assessment - This section addresses the NPS Program's existing inventory/assessment system and future needs to improve or expand assessment efforts.
- * Prioritization - This section discusses existing and future prioritization methods or strategies within the NPS Program.

- * Assistance - This section focuses on “how” the financial and technical assistance available through the Program will be delivered to state/local project sponsors.
- * Coordination - Development and maintenance of partnerships with private and local/state/federal agencies and organizations are described in this section.
- * Information/Education - The Program’s multi-year strategy for public outreach and information dissemination is described under this section.
- * Evaluation/Monitoring - Program and local project evaluation/monitoring efforts are addressed in this section.
- * Nine Key Elements of the NPS Program - This section directs the reader to specific sections or areas in the updated plan where each of the “nine key elements” are addressed.

In addition to the descriptive information, Sections III through VIII also list specific goals, objectives, and tasks that need to be completed to accomplish the Program’s long-term goal. These goals, objectives, and tasks, along with the following NPS Program mission statement and long-term goal, were developed by the State Nonpoint Pollution Task Force during a series of meetings in the spring and summer of 1998.

“The North Dakota NPS Program mission is to protect or restore the chemical, physical, and biological integrity of the waters of the state by promoting locally sponsored, incentive based, voluntary programs where those waters are threatened or impaired due to nonpoint sources of pollution.”

“The long-term goal for the North Dakota NPS Management Program is to initiate a balanced program focused on the restoration and maintenance of the beneficial uses of the State’s water resources (i.e. streams, rivers, lakes, reservoirs, wetlands, aquifers) impaired by NPS pollution.” Based on the 1998 Section 305(b) report and the related 1998 Section 303(d) list of impaired waters needing Total Maximum Daily Loads (TMDLs), there are 131 individual river and stream reaches and lakes and reservoirs which are water quality limited due to nonpoint sources of pollution. When analyzed on a 14 digit hydrologic unit scale it is estimated that these 131 waterbodies can be combined into 114 watersheds. In order to meet the long term goal of the North Dakota NPS Management Program it is the objective of the Program to complete TMDLs for each of the 131 waterbodies (114 watersheds) by 2013 and to initiate watershed restoration projects (i.e., project implementation plans) in 75 of the 114 watersheds by 2013. The Program will accomplish this objective by initiating an average of five watershed restoration projects each year through 2013 (**Note: This schedule assumes that congressional spending for Section 319 for the nation remains at the historic level of \$100 million per year and that the allocation formula for the state does not change. If future Section 319 funding remains at the FY 1999 authorized level of \$200 million then the number of watershed**

projects initiated each year should increase, assuming there are no additional workplan requirements generated under the Clean Water Action Plan (e.g., AFO/CAFO). This schedule also assumes that state and local resources to manage and implement the Program remain at their current level. Efforts to change funding for Section 319 or state and local resources, either an increase or a decrease, will affect this schedule significantly).

While the long term goal of the program is to initiate 75 watershed restoration projects by 2013, it is the Department's experience, based on the previous nine years, that it requires between seven and ten years to complete a watershed restoration project. Therefore, watershed restoration projects initiated in 2013 should not be expected to be completed until 2020-2023.

It should also be recognized that the state's water quality monitoring and assessment program is a dynamic process. Each year new lakes, reservoirs, rivers, and streams are assessed for the first time and previously monitored lakes, reservoirs, rivers, and streams are resampled and new assessments completed. Due to this dynamic process it is more than likely that additional lakes, reservoirs, rivers, and streams will be identified as water quality limited in future years. This will become even more evident as this management plan is implemented with the development of basin management committees and as these committees develop their own strategies for delineating and assessing priority 14 digit hydrologic units in their basins (see Section III. Resource Assessment, Objective 2).

As new waterbodies are assessed and identified as water quality limited due to NPS pollution and based on available resources, funding and staff, the NPS Management Program Plan will be evaluated and revised to meet new priorities and demands for program assistance. Progress towards meeting long and short term program goals and objectives will be evaluated on a five year basis. Performance measures used to evaluate program progress will include the number NPS pollution TMDLs completed, the number of watershed restoration projects initiated, and water quality assessment information included in the 2004-2005, 2010-2011, and 2014-2015 Section 305(b) reports, or their equivalent.

II. NPS PROGRAM HISTORY

In 1987 Congress acted on the need to expand the nation's pollution control efforts when they included provisions to control nonpoint source pollution in Section 319 of the reauthorized Clean Water Act. Nonpoint source pollution as defined in the Act, is pollution caused by diffuse sources that are not regulated as point sources. In more basic terms, NPS pollution can be a variety of contaminants (e.g., sediments, nutrients, etc.) that are delivered to surface waters by way of runoff or leached downward into groundwater. Some common sources of NPS pollution include urban streets and parking lots, construction sites, and agricultural lands.

Given the size of the agricultural industry in North Dakota, agriculture and its associated activities have been the primary focus of the state's NPS Program. Since 1990, a majority of the state's Section 319 funds have been directed toward locally sponsored projects promoting voluntary NPS

pollution control on agricultural lands. These funds have generally been used to implement various information/education activities and/or provide the necessary financial and technical assistance to landowners implementing best management practices (BMP) on their land. In recent years, Section 319 funding has also been used to support local initiatives to evaluate water quality conditions and determine sources and causes of NPS pollution within priority watersheds.

Since the reauthorization of the Clean Water Act in 1987 through 1998, the North Dakota NPS Pollution Management Program has used Section 319 funding to support over 40 local projects throughout the state. While the size, target audience, and structure of the projects have varied significantly, they all share the same basic objectives. These common objectives are: 1) increase public awareness of NPS pollution issues; 2) reduce/prevent the delivery of NPS pollutants to waters of the state; and 3) disseminate information on effective solutions to NPS pollution where it is threatening or impairing uses.

State and local projects currently supported with Section 319 funding essentially include three different types of projects. These project types or categories are: 1) development phase projects; 2) educational projects; and 3) watershed projects. Although most projects clearly fit into one of these categories, there are also several projects which include components from all three categories. A portion of the Section 319 funds awarded to the state have also been used to assess major aquifers in the state as well as promote and implement practices that prevent groundwater contamination.

The primary purposes of development phase projects are to identify beneficial use impairments or threats to specific waterbodies and determine the extent to which those threats or impairments are due to NPS pollution. Work activities during a development phase project generally involve an inventory of existing data and information and supplemental monitoring, as needed, to allow an accurate assessment of the watershed. Through these efforts the local project sponsors are able to: 1) determine the extent to which beneficial uses are being impaired; 2) identify specific sources and causes of the impairments; 3) establish preliminary pollutant reduction goals or TMDL endpoints; and 4) identify practices or management measures needed to reduce the pollutant sources and restore or maintain the beneficial uses of the waterbody. Development phase projects are generally one to two years in length.

Educational projects, as the name implies, are designed to disseminate information on various NPS pollution issues, ranging from specific sources or causes of NPS pollution to management solutions that can be used to reduce NPS pollution. Educational tools typically used by the sponsoring entities include brochures, all media (TV, radio, newspaper, etc.), workshops, "how to" manuals, tours, exhibits, and demonstrations. These projects are generally one to five years in length.

The watershed projects are the most comprehensive projects currently implemented through the NPS Pollution Management Program. These projects are typically the most long-term in nature and designed to address documented NPS pollution impacts and beneficial use impairments

within approved priority watersheds. Common objectives for a watershed project are to: 1) protect and/or restore impaired beneficial uses through the promotion and voluntary implementation of best management practices that reduce/prevent documented NPS pollution loadings; 2) disseminate information on local NPS pollution concerns and effective solutions to those concerns; and 3) evaluate the projects' progress toward identified use attainment or NPS

pollutant reduction goals. Watershed projects are generally five to ten years in length, depending on the size of the watershed and extent of NPS pollution impacts.

The North Dakota Nonpoint Source Pollution Management Program will continue to be a voluntary program, primarily directed toward locally sponsored initiatives that strive to reduce/prevent NPS pollution impacts to the beneficial uses of the state's water resources. As a result, successful delivery of the NPS Program must include coordination with many local/state/federal agencies as well as private organizations. Through this coordination and formation of strong partnerships, the necessary financial and technical resources will be available to local sponsors to meet their goals and demonstrate that nonpoint source pollution control/prevention can be accomplished effectively and voluntarily. Ultimately, within North Dakota, the success of any NPS pollution control project will be dependent on the ability of the local sponsors and their partners to demonstrate to agricultural producers and the general public that NPS pollution control and water quality improvement practices can co-exist with agribusiness.

III. RESOURCE ASSESSMENT

An exact and concise definition of nonpoint pollution is nearly impossible. However, most of it is generally associated with runoff, which carries sediment, nutrients, toxins, and organic material into receiving waters. Under some circumstances, groundwater can become contaminated by polluted water percolating through the soil. Nonpoint source pollution can be further described by the following:

- * It occurs over an extensive area, usually traveling overland before entering water.
- * It is not easily monitored at the point of origin and the contaminants may not be traceable to their exact source.
- * It occurs intermittently, with spring runoff and rainfall events.
- * It's magnitude is related to certain uncontrollable climatic events.

Water quality can be positively or negatively affected by all land use activities in a watershed. A watershed includes all land in a drainage system that contributes surface runoff to a given point. This point can be defined by a specific location on a river or stream or by a lake or reservoir. Any

activity within the watershed that is upstream from that “point” can impact the quality of water which is eventually delivered to or flows past that location.

The amount and type of NPS pollution occurring in an individual watershed is extremely variable and depends on several natural factors such as rainfall, vegetation, soil type and erodability, and topography. Human alteration of the physical landscape (e.g. construction, over grazing, channelization) can also be a major factor that will affect the type and amount of NPS pollution as well as the rate at which it is delivered to a particular waterbody. Within watersheds negatively impacted by human alteration, runoff associated with rainfall events or spring snow melt is generally the primary means by which the NPS pollutants are delivered to a waterbody. In certain situations or areas, these alterations can also increase the amount of NPS pollutants migrating into groundwater systems. These pollutants can be dissolved or suspended.

Various contaminants are delivered to the state’s surface and/or ground water resources. These contaminants originate from a variety of sources including agricultural and urban areas, deforestation, mining and construction sites, and from hydromodifications, such as stream channelization or impoundments. The 1998 state water quality assessment report [i.e., Section 305(b) report] identified over 3000 river and stream miles in the state as partially supporting aquatic life use with an additional 7400 miles as fully supporting, but threatened. For purposes of Section 305(b) reporting threatened is defined as “if water quality trends continue, the stream may not fully support its use in the future. Nutrient loading, siltation, and riparian habitat loss or degradation were identified as the primary pollutant cause of aquatic life use impairment. A review of the assessment data which comprised the 1998 Section 305(b) report shows these pollutants as the primary threat to aquatic life use as well. Other causes identified in the report were trace element contamination, flow alteration, and organic enrichment. These pollutants primarily originate from agricultural nonpoint sources, including cropland erosion and runoff, animal feeding operations, and poor grazing management. Other nonpoint sources identified in the Section 305(b) report as contributing to aquatic life use impairment were urban runoff and hydrologic modifications (e.g., upstream impoundments, low-head dams, channelization, and wetland drainage).

The Section 305(b) report also identified 50 lakes and reservoirs, totaling 24,609 acres, and 51 lakes, totaling 99,473 acres, as partially supporting aquatic life use and recreation use, respectfully. One of the primary causes of aquatic life use impairment identified in the Section 305(b) report is low dissolved oxygen in the water column. Low dissolved oxygen can occur in the summer (referred to as summer kills), but usually occurs in the winter under ice cover conditions. Low dissolved oxygen conditions and winter kills occur when senescent plants and algae decompose, consuming available oxygen. In most situations, the growth of excessive aquatic plants and algae in a lake or reservoir can be attributed to increased nutrient loading and lake shallowing through sedimentation. Major nonpoint sources of nutrient loading to the state’s lakes and reservoirs are erosion and runoff from cropland, runoff from animal feeding operations, and hydrologic modifications, such as wetland drainage, stream channelization, and ditching. Other nonpoint sources of nutrients to lakes and reservoirs include shoreline and cabin

development. Typically, lake cabins and homes use septic systems (tanks and drain fields) to contain and treat their wastewater. Many of these systems are poorly designed, poorly maintained, or nonexistent.

Recreation use impairments to the state's lake and reservoirs are also primarily due to excessive aquatic plant growth and nuisance algal blooms caused by excessive nutrient loading from nonpoint sources. In addition to the 51 lakes assessed as partially supporting recreation use, 50 lakes, totaling 391,010 acres, were assessed as fully supporting recreation use, but threatened. Nutrient loading was also linked to the negative water quality trends these lakes are experiencing. If left unchecked, these lakes will degrade to the point where frequent algal blooms and/or excessive weed growth will negatively affect recreation.

The complex nature of NPS pollution means that control programs will not be easy to establish or maintain. Controlling the sources of NPS pollution requires solutions as diverse as the pollution itself. The North Dakota Nonpoint Source Assessment Report identifies specific categories and subcategories of NPS pollution sources (Table 1).

The North Dakota Department of Health (NDDH) is the lead water quality agency in the State of North Dakota. As such, the NDDH administers the NPS Pollution Management Program and is responsible for water quality assessments under a number of other programs. Section 305(b) of the Clean Water Act requires states to submit a Water Quality Assessment Report every two years. The most recent report, published in 1998, entitled North Dakota Water Quality Assessment (1996-1997) (Appendix 1), indicates there are 54,373 river and stream miles and 220 lakes and reservoirs currently recognized in the state. The lakes and reservoirs include 131 manmade reservoirs and 89 natural lakes, with a combined surface acreage of 660,097 acres. The 1998 Section 305(b) Report provided assessments on 11,928 miles of streams and rivers and 116 lakes and reservoirs. The report also stated there are approximately 2.5 million acres of wetlands and 192 separate glacial drift aquifers in the state. Bedrock aquifers, which are more continuous and widespread than the aquifers in the unconsolidated rock, include the Dakota, Pierre, and Fox Hills-Hell Creek aquifers of the Cretaceous Age and the Fort Union Aquifer of the Tertiary Age.

The state of North Dakota considers the biennial Section 305(b) water quality assessment report to be an integrator of all credible "existing and available" water quality assessment data and information. This data and information, which is summarized statewide or by basin for the Section 305(b) report, is integrated as beneficial use assessments which are entered into a waterbody "accounting"/database management system developed by EPA. This system, which provides a standard format for water quality assessment information is termed the Waterbody System (WBS).

Table 1. Categories and Subcategories of NPS Pollution Sources.

<u>Agriculture</u>	<u>Resource Extraction/Exploration/Development</u>
Non-irrigated crop production	Surface mining
Irrigated crop production	Subsurface mining
Pasture grazing - riparian and upland	Petroleum activities
Pasture grazing - riparian	Abandoned mining (gravel pits)
Pasture grazing - upland	
Concentrated animal feeding operations	<u>Land Disposal (runoff/leachate from areas)</u>
Confined animal feeding operations	
Aquaculture	Sludge
Rangeland - riparian and upland	Wastewater
Rangeland - riparian	Landfills
	Industrial land treatment
<u>Silviculture</u>	On-site wastewater systems (septic tanks, etc.)
Harvesting, restoration, residue management	<u>Habitat Modification</u>
Forest management	Removal of riparian vegetation
Logging road construction/maintenance	Bank or shoreline modification/destabilization
<u>Construction Runoff</u>	Drainage/filling of wetlands
Highway/road/bridge construction	<u>Hydromodification</u>
Land development	
<u>Other</u>	Channelization
Golf Courses	Dredging
Erosion from derelict land	Dam construction
Atmospheric deposition	Upstream impoundment
Waste storage/storage tank leaks	Flow regulation/modification
Highway maintenance and runoff	<u>Urban Runoff/Storm Sewers</u>
Spills	Nonindustrial
Natural sources	Industrial
Internal nutrient cycling	Surface runoff
Sediment resuspension	Other urban runoff
Sources outside jurisdiction or borders	Highway/road/bridge runoff
	Erosion and sedimentation

North Dakota's WBS contains 1,677 discreet waterbodies representing 54,373 miles of rivers and streams and 220 lakes and reservoirs. The river and stream miles have been delineated into 1457 separate waterbodies. Within the WBS, designated uses are defined for each waterbody as they relate to the state's water quality standards. Each use is then assessed based on available chemical, physical, and biological data. In some cases information gathered by local soil conservation districts, water resource boards, or federal agencies is used to make use support determinations. A detailed description of the WBS as well as the state water quality assessment methodology can be found in the 1998 Section 305(b) Report.

With an estimated 54,373 miles of rivers and streams and 660,097 acres of lakes and reservoirs it is impractical to assess all the stream miles or lake acreage every two years. However, it is important to accurately assess those waters for which beneficial use assessment information is available and account for those stream miles and lake acres that are not assessed every two years.

Assessments completed and entered into the WBS also form the basis for the state's Section 319 Nonpoint Source Pollution Assessment Report (Appendix 2). The NPS Assessment Report includes data from the Section 305(b) and TMDL reports as well as observations from local individuals in the field. This data/information is organized according to the major river basins in the state to assess NPS pollution concerns in each basin. The purpose of the NPS assessment report is to describe the extent of NPS pollution in the major basins and provide guidance for the prioritization of the state's waterbodies for further monitoring and assessment activities, project development, or implementation. The current NPS Assessment Report, which was completed in 1988, is scheduled to be updated in 1999.

Where a waterbody is water quality limited the state is required to, in a reasonable time frame, determine the reduction in pollutant loading necessary for that waterbody to meet water quality standards, including beneficial uses. The process by which the pollutant loading capacity of a waterbody is determined and a load is allocated for point and/or nonpoint sources is called a total maximum daily load or TMDL. Although the term TMDL implies that loading capacity is determined on a daily time scale, TMDL's can range from meeting an instantaneous concentration (i.e. an acute standard) to computing an acceptable annual phosphorus load for a lake or reservoir.

When a state prepares its list of water quality limited waterbodies the state is required to prioritize waterbodies for TMDL development and identify those waterbodies which will be targeted for TMDL development within the next two years. Factors to be considered when prioritizing waterbodies for TMDL development include: 1) the severity of the pollution and the uses which are impaired; 2) the degree of public interest or support for the TMDL, including the likelihood of implementation of the TMDL; 3) recreational, aesthetic, and economic importance of the waterbody; 4) the vulnerability or fragility of a particular waterbody as aquatic habitat; 5) immediate programmatic needs, such as wasteload allocations needed for permit decisions or load allocations for Section 319 nonpoint source project implementation plans; and 6) national policies and priorities identified by EPA.

Section 303(d) of the Clean Water Act requires states to submit their lists of water quality limited waterbodies by April 1 of every even numbered year. This list has become known as the "TMDL list" or "Section 303(d) list" (Appendix 3). Because of the way in which the NDDH Surface Water Quality Management Program is structured there is a complete integration of the state's Section 305(b) water quality assessment report, Section 303(d) TMDL list, and Section 319 Nonpoint Source Assessment Report.

Other assessment resources available to the program include the ND Geographic Targeting System for Groundwater Monitoring, and the ND Groundwater Monitoring Program Reports (Appendix 4 & 5). These resources provide a prioritization system for identifying aquifer vulnerability to contamination, and monitoring data for high priority aquifers. The monitoring includes all major glacial drift aquifers in the state.

ASSESSMENT NEEDS

With over 54,000 river and stream miles and 220 lakes and reservoirs in the state, it's difficult to provide timely assessments of all the water resources of the state. Currently, one of the six major basins identified in the ND Water Quality Assessment report is assessed intensively per year so each basin is assessed on a six year rotating schedule. Even then, a thorough assessment within any given basin leaves some subwatersheds unassessed simply due to the size of the basin. Consequently, many subwatersheds in the state have not been thoroughly assessed and may not be in the near future, unless they are identified by observation to have water quality problems. If observed water quality problems are reported, the areas can then be targeted for assessment and monitoring activities under a variety of programs.

To ensure limited financial and technical resources for NPS pollution control are used efficiently, the NPS Task Force has recognized the need to more accurately assess water quality and/or beneficial use impairments within the state's watersheds, and where they occur, identify the sources and causes of those impairments. These assessments will involve the analysis of existing and new data as well as the identification of specific causes and sources of pollution. In addition, future inventory and assessment efforts will not be limited to large basins or geographic areas, but will include assessments ranging from the statewide level down to small subwatersheds (e.g. 14 digit hydrologic units).

The ND NPS Task Force identified the following goals, objectives, and tasks relative to the NPS Program's inventory/assessment efforts.

Assessment Goal: To accurately and thoroughly assess beneficial use support and the sources and causes of use impairments within the state's watersheds.

Objective 1. Complete periodic assessments of the eight digit hydrologic units in the state.

Task 1: Review various assessment methods and existing water quality and natural resource inventory (NRI) data to develop a strategy for completing a unified assessment of the eight digit hydrologic units in the state.

Product: Data sets and process for assessing the eight digit hydrologic units

Milestone: August 1998

Task 2: Conduct an assessment of the state's eight digit hydrologic units every five years.

Product: Unified Watershed Assessment Reports (Appendix 6)

Milestone: October 1998, 2003, 2008, etc.

Objective 2. Develop and implement a strategy/process that will allow accurate assessment of the water quality and beneficial use conditions within the state's 14 digit hydrologic units.

Task 3: Coordinate with the appropriate agencies and organizations to delineate and digitize the 14 digit hydrologic units in the state.

Product: GIS coverage and maps of the state's 14 digit hydrologic units

Milestone: October 2000

Task 4: Inventory existing data/information and determine data needs (land use, water quality, biological, etc.) for accurately assessing the 14 digit hydrologic units.

Product: Summaries of existing data to be used for identifying and prioritizing data collection needs, by 14 digit HUC, within the six major river basins.

Milestone: The summaries for the first two basins will be completed by March 2001 with subsequent summaries of the other four basins completed by March 2003, at a rate of two basins per year.

Task 5: Coordinate and implement monitoring and assessment activities, within each major river basin, targeting the priority 14 digit hydrologic units lacking sufficient data/information to determine beneficial use impairments .

Product: Local and/or state level Sampling and Analysis Plans (SAP) and/or strategies describing monitoring and assessment goals and objectives, sampling procedures, and responsible organizations. -- 3-5 SAP's or strategies developed and implemented/year.

Milestone: This will be an ongoing effort - The first SAP's or strategies will be developed and initiated by October 2002

Task 6: Compile existing and new data to assess beneficial use support and watershed conditions within the each river basin's 14 digit hydrologic units.

Product: Updated NPS Assessment Reports based on data collected within the watersheds (14 digit HU's) in the major river basins

Milestone: July 1999, 2004, 2009, etc..

Objective 3: Establish watershed specific restoration goals (e.g. TMDL goals) for the highest priority Tier II subwatersheds (e.g. 14 digit HU's) within the six major river basins and develop project implementation plans (PIP's) based on the identified pollutant reduction (e.g. TMDL endpoints) and/or beneficial use improvement goals.

Task 7: Provide assistance to local resource managers, Project Advisory Committees, and/or Basin Management Committees to prioritize subwatersheds and establish assessment strategies for each of the six river basins.

Product: A priority watershed/waterbody list, by basin, identifying the Tier I, II, or III waterbodies in each major river basin, including local plans or strategies for assessing the subwatersheds in each basin.

Milestone: Ongoing effort; will be initiated October 1998

Task 8: Based on local priorities, assist local sponsors with the development of watershed specific sampling and analysis plans (SAPs) and the collection and interpretation of monitoring data to; 1) establish watershed specific goals based on identified use impairments associated with NPS pollution and; 2) determine management needs for addressing specific sources and causes of NPS pollution.

Product: An average of ten watershed specific assessment reports (e.g. TMDLs, watershed PIPs) annually from 1999 through 2013.

Milestone: Ongoing effort; will be initiated in October 1999

Objective 4: Assess/evaluate the success of local project efforts (e.g. BMP implementation) to improve water quality and restore and/or maintain the beneficial uses of waterbodies impacted by NPS pollution.

Task 9: Assist local sponsors with the development and implementation of SAPs that are based on pollutant reduction (e.g. TMDL endpoint) and/or beneficial use improvement goals for waterbodies/watersheds being targeted in project implementation plans (PIPs).

Product: SAPs for inclusion in all watershed PIPs; 2-5 watershed PIPs/year

Milestone: Ongoing effort; SAP's for all "new" watershed projects will be completed by September of each year. -- 1999 through 2013.

Task 10: Compile data collected within the watersheds and evaluate progress toward the project's beneficial use restoration and/or pollutant reduction goals.

Product: Reports for each watershed project area describing the success of the local sponsor's efforts to achieve the project goals (e.g. reduce identified NPS pollution causes and/or restore impaired beneficial uses); 2-5 end-of-project reports per year

Milestone: Ongoing effort; Data will be reviewed and summarized annually; End-of-project reports will be completed by July of each year.

The NDDH and NRCS will complete the review, revision, and development of the unified inventory and assessment method. The NPS Task Force will review and approve the methods. The NDDH will assess the data needs per basin, and complete the Nonpoint Assessment Report. The assessment efforts will involve a variety of public and private entities, including the NDDH, NRCS, USGS, and local project sponsors (e.g. Soil Conservation Districts, Water Resource Boards).

IV. PRIORITIZATION

The state's TMDL list, Unified Watershed Assessment, and watershed specific assessment reports currently serve as the primary reference documents for prioritizing waterbodies and projects under the NPS Management Program. To provide better direction for selecting future projects and ensure limited funding is used efficiently, the NDDH and NPS Pollution Task Force have developed the NPS Management Program's waterbody prioritization process. Lakes, reservoirs, streams, rivers and their watersheds are separated into one of three different categories or tiers. Placement of a particular waterbody into Tier I, II, or III is based on the credible data or "evidence" available on the impairments/threats to the waterbody's beneficial uses and the extent to which those impairments are due to NPS pollution.

Tier I waterbodies include all lakes, reservoirs, streams, and rivers where beneficial use impairments or threats are well documented and the problems are known to be predominantly due to NPS pollution. Each Tier I waterbody has sufficient monitoring/modeling information available to document the sources and causes of use impairments/threats and establish reduction goals for all pollutants limiting the designated uses of the waterbody. Waterbodies in this group will have a completed watershed specific assessment report or TMDL. Tier I waterbodies and their watersheds are eligible for Section 319 implementation phase funding.

Waterbodies in the Tier II category include lakes, reservoirs, streams, and rivers where there is sufficient evidence that beneficial uses are being impaired or threatened. However, there is not sufficient information available to accurately identify the causes and sources of these impairments/threats or determine if the impacts are due wholly or partially to NPS pollution. Lakes, reservoirs, rivers, and streams in this group will include waterbodies that are identified in the TMDL list or waterbodies that have been assessed through other programs, but lack sufficient

“credible data” to warrant listing on the TMDL list. Information regarding beneficial use impairments of Tier II waterbodies may be based on monitoring data or observations such as best professional judgment and questionnaire feedback. Before Tier II waterbodies would be eligible for Section 319 implementation funding, these waterbodies and their watersheds will need to be further assessed to; 1) document the extent of beneficial use impairment to the waterbody; 2) determine NPS pollution sources and causes; and 3) establish pollutant reduction targets. When available, TMDL grants, Section 604(b) funds, or Section 319 development phase funding will be used to complete the watershed assessments. Upon completion of the assessments, the Tier II waterbodies can be elevated to the Tier I category.

Tier III waterbodies are lakes, reservoirs, rivers, and streams for which there is no assessment information for the waterbody. Tier III waterbodies lack assessments of beneficial use impairments/threats as well as information on sources and causes of NPS pollution in the watershed. Due to this lack of information, Tier III waterbodies are targeted for other NDDH monitoring and assessment activities (e.g., lake water quality assessment, chemical stream monitoring, biological monitoring, fish tissue surveillance, or volunteer monitoring). Waterbodies under this category will not be eligible for Section 319 funding until sufficient data is collected to elevate them to either Tier I or II.

The development of the three-tiered waterbody prioritization process is the first step toward creating a more structured system for targeting and approving future NPS pollution control projects. The next step will be to delineate the state’s waterbodies and their watersheds and assign a “Tier” ranking. Tier III waterbodies will then be integrated into the existing programs of the NDDH or other agencies. Tier II waterbodies will be further prioritized and, based on that prioritization, targeted for project development and assessment activities. Tier I waterbodies will be eligible for the implementation of comprehensive NPS pollution management projects.

As the new waterbody prioritization process evolves, it is anticipated there will be a need to rank or prioritize waterbodies within the Tier I and II categories. This will involve the development of additional criteria to further prioritize the Tier I and II waterbodies.

PRIORITIZATION NEEDS

Currently, the primary factors or criteria used to prioritize projects for funding include: 1) the level of local support; 2) local sponsor commitments; 3) availability of local financial and technical assistance; and 4) the availability of existing data on the targeted waterbody and its watershed. Because the NPS Program is a “voluntary” program, local support and commitment will continue to be one of the main criteria used to evaluate projects for future funding. However, the prioritization process also needs to include additional criteria that focuses on the quality of assessment data and other information that describes beneficial use impairments and the associated corrective measures needed to maintain or restore a waterbody’s beneficial uses.

Tier II waterbodies are those waterbodies where there are identified beneficial use (e.g. fish kill, algal bloom, etc.) impairments or threats based on observation or listing on the TMDL list. In the past, these waterbodies have been prioritized for project development or assessment activities on a first come, first served basis. If a local project sponsor was in place, an assessment plan developed, and funding available as many as four assessment phase projects could be funded in a year. The assessment activities generally lasted one to two years and included, at a minimum, a water quality monitoring plan and a watershed land use inventory. These assessment activities were initiated to obtain sufficient information to accurately identify the causes of water quality problems and the extent to which the problems were due to NPS pollution.

To date, the “first come, first served prioritization system” for assessment phase projects has worked quite well. Under this system, the only limiting factor for approving projects has been the availability of state NPS Pollution Management Program staff to assist in the coordination of the assessment phase projects. As the program grows, it is anticipated the number of requests for assessment projects will exceed the available funding and program staff time to support the requests. Due to these constraints, a more structured prioritization system needs to be developed to assure the highest priority waterbodies are targeted for assessment. The recently developed Section 303(d) list of water quality limited waterbodies needing TMDL’s will be an important component of this process.

After a Tier II waterbody assessment project is completed and watershed specific goals, such as a TMDL, are established, the waterbody is moved into the Tier I category. As a Tier I waterbody, Section 319 implementation phase funding can be used to address identified sources and causes of NPS pollution to achieve the water quality and/or beneficial use improvement goals for the watershed.

To ensure implementation phase funding is used effectively, additional criteria will need to be developed to prioritize waterbodies within the Tier I category. Currently, implementation phase projects are approved for funding on much the same basis as assessment projects (i.e. first come, first served), with the only major distinction being implementation phase projects are reviewed and ranked by the NPS Pollution Task Force. The primary focus of the Task Force review has been to determine if the project proposals address NPS pollution concerns within the targeted watersheds and contain all the information required in the EPA guidance for developing watershed project implementation plans (PIPs). However, as the NPS Management Program grows, and implementation phase funding requests exceed the available funding, the current review process will need to include a prioritization system to ensure the highest priority Tier I waterbodies are targeted for implementation phase funding.

Occasionally, there will be some waterbodies which are high priority, where assessment or implementation phase projects are not proceeding for any number of reasons (lack of local sponsorship, lack of local funding, etc.). Once prioritization criteria are developed and high priority waterbodies are identified, funding for various information/education efforts could be targeted to those areas. These funds would be used to develop informational materials, conduct

workshops, etc. to increase local residents' awareness and understanding of NPS pollution management.

Local input will also be an important component of the prioritization system which will be developed for the "Tiers" for each basin. One program task that will be particularly useful for obtaining local input will be the development of "Basin Management Committees." These committees will not only offer an organized forum for gaining direct local input regarding basin priorities, but will also serve as "basin working groups" to oversee and direct: 1) the collection of additional assessment data or information; and 2) the implementation of projects addressing identified NPS pollution concerns within the priority watersheds. The development of the Basin Management Committees is discussed in detail in the Coordination Section.

Prioritization Goal: Based on the most current inventory and assessment data, prioritize the state's waterbodies/watersheds for future NPS pollution assessment or abatement efforts.

Objective 1: Categorize all of the state's waterbodies/watersheds into one of the three Priority Tiers.

Task 1: Delineate the waterbodies/subwatersheds within each of the six major river basins at the 14 digit HUC level or lower.

Product: GIS coverage and maps identifying waterbodies/subwatersheds within each river basin

Milestone: October 2000

Task 2: Review the most current data/information (e.g. watershed assessment reports, 303(d) list, landuse inventories) for the subwatersheds in each river basin and assign Tier rankings.

Product: Inventory of existing data/information with GIS coverage and maps identifying Tier rankings for the subwatersheds in the six major river basins.

Milestone: The summaries for the first two basins will be completed by March 2001. Subsequent inventories and rankings of the other four basins will be completed by March 2003, at a rate of two basins per year.

Objective 2: Establish basin priority rankings for each of the Tier I, II, and III subwatersheds in the six major river basins in the state.

Task 3: In cooperation with Basin Management Committees, local resource managers, etc., identify “basin specific” criteria for prioritizing the waterbodies/watersheds within each Tier.

Product: Prioritization processes for Tier I, II, and III waterbodies/watersheds in each basin.

Milestone: October 2001

Task 4: Obtain input on local priorities regarding watershed, water quality, and NPS pollution management within the six major river basins and their subwatersheds.

Product: Three to four public meetings/basin; local priority rankings of the subwatersheds within the basins (e.g. maps and/or information identifying local priorities)

Milestone: Initial meetings within each basin will be conducted from October 1999 through October 2001. Based on the outcome of these meetings, each basin will set its own schedule for subsequent meetings to complete this task. It is recognized that this task will be an ongoing effort to accommodate periodic updates to the management plan and waterbody prioritization list

Task 5: Based on local input and available data, assign priority ratings (e.g. high, medium, low) for the Tier I, II, and III waterbodies/watersheds in each major river basin.

Product: Waterbody priority list and maps identifying priority ratings of the Tier I, II, and III waterbodies within each major river basin.

Milestone: October 2001, 2002, and 2003 at a rate of two basins per year.

The NDDH and NPS Task Force, with input from each of the Basin Management Committees, will identify the criteria and develop the process for prioritizing each river basin’s Tier I, II, and III waterbodies/watersheds. The local input will be a key component of the prioritization process. Primary sources for existing data (e.g. water quality, land use, etc.) will include the NDDH, USGS, and NRCS. The NDDH and NPS Task Force will promote the development of implementation and assessment projects within high priority watersheds. This will be accomplished by working with Basin Management Committees and local resource managers, such as soil conservation districts, and/or water resource boards. Projects will be promoted through various information/education events that will increase local residents awareness and understanding of NPS pollution concerns within “their” watershed or river basin.

V. ASSISTANCE

The ND NPS Program has successfully assisted numerous local entities with the development and implementation of a variety of projects addressing NPS pollution. During the period of 1990 through 1998, there has been over 40 local projects which have been allocated Section 319 funding through the NPS Management Program. The cumulative total of the Section 319 funding provided to these local projects accounts for over 80% of the total Section 319 funds appropriated to the state. The balance of the Section 319 funds awarded to the state have been used to support program management and projects sponsored by other state agencies.

As a voluntary, incentive based program, the successful development and implementation of any NPS pollution management project will be dependent on local support and involvement. Local participation during project development provides the opportunity to design project plans that will more effectively address local watershed management goals and objectives associated with identified water quality and/or NPS pollution concerns. Although the size, type, and target audience of the local NPS projects may vary greatly, they all generally share the same basic objectives. These common objectives are to: 1) increase public awareness of NPS pollution, 2) reduce/prevent the delivery of NPS pollutants to waters of the state, and 3) disseminate information on effective solutions to NPS pollution.

To assist local entities in meeting their project goals and objectives, the NPS Management Program provides financial and technical assistance for a variety of project activities including, information/education (I/E) events (e.g. demonstrations, workshops), BMP implementation, water quality monitoring, and farm unit planning. Projects that focus on public education are typically initiated to familiarize the general public and/or agricultural producers with the types of NPS pollution in the state and their area, as well as the various methods available for NPS pollution control. In conjunction with the educational activities, many of the projects, particularly the watershed projects, also provide financial and technical assistance to promote the implementation of BMPs that reduce NPS pollution. Ultimately, the success of any project will be dependent on the sponsors' ability to educate local residents on the concerns and solutions associated with NPS pollution in their watershed and to encourage the voluntary implementation of the appropriate solutions or corrective measures.

Under the state's NPS Management Program, projects are generally grouped into one of three separate categories. Placement of a given project into any one of these categories is simply based on the project's primary goals, objectives, and tasks. Project categories include: 1) development phase; 2) watershed; and 3) education.

Development Phase Projects

Development phase projects are the first step to determining the need for NPS pollution controls and Section 319 funding. These projects are generally initiated by local groups or organizations in response to an observed water quality problem and/or other information on water quality

conditions in a local watershed (e.g. lake water quality reports). Information and/or data collected through the development phase projects is typically used to: 1) determine the extent of beneficial use impairments associated with NPS pollution; 2) identify sources and causes of NPS pollution; 3) establish watershed specific NPS pollutant reductions targets for restoring impaired uses and/or water quality; and 4) update the NPS Management Program's priority ranking (e.g. Tier II to Tier I) for the waterbody/watershed. In some instances, development phase projects may take on a broader view and be conducted to simply prioritize subwatersheds within a larger watershed or river basin. These types of development phase activities would be used to direct future monitoring and assessment efforts in targeted subwatersheds to more effectively assess a larger watershed or basin.

Development phase projects within a Tier II waterbody/watershed are generally one to two years in length. These projects focus on site specific monitoring to collect data necessary for assessing conditions within the waterbody/watershed and identifying the causes and sources of NPS pollution impairing the waterbody. Project tasks include a review of existing water quality and landuse data and the collection of additional water quality, biological and/or land use data to allow an accurate assessment of the waterbody and its watershed. In conjunction with these activities, the project sponsors and NPS Program staff also conduct public meetings/workshops to gain local input and gauge the level of support for the implementation of a project addressing identified NPS pollution concerns. Information collected and compiled during development phase projects assist local natural resource managers in identifying future needs within the proposed project area and provides direction for the formulation of a project implementation plan.

Watershed Projects

Watershed projects are the most comprehensive projects currently implemented through the NPS Pollution Management Program. These projects, the most long-term in nature, are designed to address documented NPS pollution impacts within Tier I priority watersheds. The primary goal of watershed projects is to restore impaired or threatened beneficial uses of a waterbody by reducing and/or preventing specific causes and sources of NPS pollution. Project goals are accomplished by: 1) promoting the voluntary application of BMPs; 2) disseminating information on effective solutions to NPS pollution impacts; and 3) evaluating the project's progress and benefits. Local sponsors use Section 319 funding, USDA cost-share assistance, and local funds to employ staff, cost-share BMPs, conduct I&E events, and monitor water quality and land use trends. Watershed projects are generally five to ten years in length, depending on the size of the watershed and extent of beneficial use impairments associated with NPS pollution.

To effectively reduce or eliminate the transport of NPS pollutants to surface and/or ground water resources, various "source control" measures are implemented within the watershed project areas. Source control measures are simply defined as best management practices (BMPs) that are designed to: 1) prevent pollutants from leaving a specific area; 2) reduce/eliminate the introduction of pollutants; 3) protect sensitive areas; and/or 4) prevent the interaction between precipitation and pollutants.

Approved BMPs under the NPS Pollution Management Program include practices associated with agriculture, forestry management, stream/riparian restoration, and urban stormwater management. Voluntary implementation of the appropriate BMPs is best accomplished by providing local resource managers and/or landowners one-on-one technical assistance and, when necessary, sufficient cost-share assistance to install the appropriate BMP. The specific BMPs which are implemented will be dependent on: 1) the type of NPS pollutants being addressed; 2) the specific sources and causes of NPS pollution; 3) the NPS pollution delivery mechanisms; and 4) the resource managers and/or landowners willingness and ability to implement the practices.

While many BMPs can be implemented with very little or no expense, some practices do require a substantial investment. In such instances, the NPS Management Program will provide cost-share assistance to offset expenses associated with the application of certain BMPs. Cost-share assistance is provided at a sixty percent (60%) Section 319 and forty percent (40%) landowner/sponsor matching ratio. The 40% match responsibility of the cooperating landowner and/or sponsors can be provided in the form of cash and/or in-kind match. Approved NPS Pollution Management Program BMPs and cost-share guidelines are included in Appendix 7.

Recipients of Section 319 cost-share assistance for the installation of BMPs will be responsible for the operation and maintenance of such practices. All cost-shared BMPs must be maintained at a functional level for the life span of the practice. The life span of a practice is the minimum number of years the practice should serve its purpose with normal care and maintenance. Cost sharing must be refunded if the recipient destroys a practice during its life span, unless a release is approved by the NDDH before the practice is destroyed.

Maintenance of a practice is the keeping of a practice in a workable condition for its specified life span. There are many practices, such as forestry plantings and water impoundment reservoirs, that should last well beyond the maximum 10 year life span. Therefore, the project sponsors and staff must advise cost-share recipients they will be expected to maintain the practice for all its useful life.

The maintenance and operation of cost-shared practices will be determined through periodic compliance checks. A maintenance compliance check is a random sampling of prior years' practices to determine if a practice is being maintained properly. For compliance spot-checking purposes, no practice will have a life span greater than 10 years. Those practices which have a life span less than 10 years will be subject to compliance checks only during the life span specifically identified for that practice. The local Section 319 project sponsors and/or staff will be responsible for verifying compliance for the duration of the project period. Post project compliance checks of BMPs with life spans exceeding the length of the project will be the responsibility of the NDDH.

Information/Education Projects

The third type of NPS project is the information/education (I/E) projects. As the name implies, projects in this category are those projects that are designed to educate the public on various NPS

pollution issues. Given the importance of information/education within the NPS Management Program, it is addressed separately in Section VIII of this plan. However, it is important to realize that education is a major component of all the local development/assessment phase projects and watershed projects supported through the NPS Management Program. The I/E events conducted in conjunction with the development/assessment or watershed projects are accomplished through a coordinated effort involving NPS Management Program personnel and local sponsors and staff. NRCS and North Dakota State University Extension Service personnel also participate in the development and implementation of many of the local I/E events.

Local Project Sponsors/Partners

Sponsorship and management of local NPS pollution projects is usually provided by soil conservation districts (SCDs) and/or water resource boards (WRBs). Financial and/or technical assistance provided to the local sponsorships through the NPS Management Program is typically directed toward activities such as staffing and support, BMP implementation, biological and water quality sample collection and analysis, data interpretation, and public meetings or other I/E events. Section 319 funding allocated to the local sponsors is provided at a 60% Section 319 and 40% local matching ratio. The local match, provided in the form of cash and/or in kind services, is generally derived from a number of local partners including, SCDs, WRBs, city councils, private foundations and trusts, landowners, wildlife groups, and agricultural companies. In most projects, these same groups will be represented on the “Local Project Advisory Committee” and/or “Basin Management Committee.”

The NRCS also contributes a significant amount of financial and technical assistance to local NPS pollution projects. Assistance from the NRCS generally includes technical assistance for landuse/riparian assessments and farm unit planning as well as office space and equipment. During the development of SAPs for development/assessment phase projects or PIPs for watershed projects, the NRCS State Conservationist and the appropriate Assistant State Conservationist review the project plans to determine the level of NRCS assistance that can be provided to the projects. This review process is conducted to ensure the appropriate NRCS assistance will be available to the projects. Financial assistance through various USDA Programs has also been an important component of the watershed projects. Of all the USDA programs, the Environmental Quality Incentives Program (EQIP) and Conservation Reserve Program (CRP) are essential for assisting local sponsors to meet their NPS project goals and objectives. NRCS personnel also participate in many of the local public meetings and other educational events. Other agencies or organizations which provide financial and/or technical assistance to the local project sponsors include, NDSU Extension Service, County Commissions, Ducks Unlimited, ND Wetlands Trust, USDA-Farm Services Agency, N.D. Game and Fish Department, USGS, local wildlife clubs, and city councils. Table 2 lists the various organizations and groups which have sponsored NPS projects in North Dakota.

Table 2. Local and State Agencies or Groups Which Have Sponsored or Cosponsored NPS Pollution Control Projects.

Soil Conservation Districts	State Water Commission
Water Resource Districts	N.D Department of Agriculture
City Councils	RC&D Councils
Universities	County Commissions
Grazing Associations	

ASSISTANCE NEEDS

Successful delivery of the NPS Pollution Management Program takes a tremendous amount of coordination and an even greater amount of financial and technical assistance to ensure local NPS pollution management goals and objectives are achieved. Through direct interaction, meetings, conferences, and workshops involving local groups and project sponsors, NPS Management Program personnel have been able to gain valuable insight on specific assistance needs at the local level. Based on this feedback, there are three factors limiting the development and/or implementation of local projects addressing NPS pollution. These factors are: 1) limited financial assistance at the local level to match Section 319 funds; 2) availability of technical assistance or local expertise to provide farm unit planning or recommendations for the appropriate BMPs; and 3) insufficient information, education, or knowledge regarding the effects of NPS pollution. While most local groups recognize Section 319 funding is available, they are concerned with the amount of local match needed for a project, and how and where these matching funds could be generated. Local groups also indicated, that there is a need for local staff and resource managers to gain a better understanding of the NPS Management Program, in general, as well as how to identify and address beneficial use impairments associated with NPS pollution.

Given the local concerns regarding costs and project management, NPS Management Program personnel will actively participate in Basin Management Committee and local project advisory committee meetings to strengthen the local partners' ability to effectively identify and address NPS pollution in their basin or watershed. NPS Management Program support or assistance will be available during all levels of project development and implementation including, Section 319 financial assistance as well as technical assistance. This assistance will generally be associated with: 1) expansion of local partnerships to include private sector organizations (e.g foundations, industry); 2) guidance on NPS project management; 3) dissemination of information on NPS pollution and water quality; and 4) coordination with other NPS projects. To accommodate the NPS Management Program's Tier I, II, & III system for prioritizing waterbodies, the type and level of assistance provided to the local sponsors will also be based on the local or basin priority ranking of the targeted waterbody or watershed. The NPS Pollution Task Force has identified the following goal, objectives, and tasks relative to the delivery of NPS Program assistance.

Assistance Goal: To provide sufficient financial and technical assistance to local resource managers (e.g. SCDs, WRBs) to ensure accurate identification of impairments to water quality originating from NPS pollution and effective initiation and completion of projects that will restore and/or maintain the beneficial uses of waterbodies impacted by NPS pollution.

Objective 1: Increase the ability of potential sponsors to determine their local NPS pollution management needs and develop strategies or plans that will effectively address those NPS pollution concerns.

Task 1: Develop and distribute reference materials describing NPS pollution project development and management to soil conservation districts, water resource boards, and other potential local sponsors.

Product: 150 NPS Project Proposal and Reference Guides

Milestone: October 1998 with updates to the Guide completed annually

Task 2: Organize and conduct local workshops and/or training sessions focusing on NPS pollution management, water quality/NPS pollution assessment, and project development. The primary target audience will be local resource managers and staff (e.g. SCDs, WRBs) and NRCS field office staff.

Product: 6 workshops or training sessions

Milestone: August 1999 through July 2001

Objective 2: Provide financial and technical assistance to Basin Management Committees and local project advisory committees to develop and implement assessment projects (or TMDLs) which will elevate priority subwatersheds in each basin to a Tier I ranking.

Task 3: Based on local or basin priorities, provide technical assistance to local resource managers (e.g. SCDs, WRBs) and/or Basin Management Committees with the development of assessment strategies and/or sampling and analysis plans (SAPs) for the highest priority Tier II and III waterbodies/watersheds in each basin. Watershed assessment strategies and/or SAPs will describe monitoring and assessment goals, objectives, and tasks, sampling procedures, responsible parties, costs, milestones, and quality assurance/quality control requirements.

Product: 4-6 planning meetings per year; 10 assessment strategies/SAPs per year

Milestone: This will be an ongoing effort. The targeted completion date for the strategies/SAPs for each sampling season is February. -- February 1999, 2000, etc.

Task 4: Complete contractual/financial agreements with local sponsors and implement monitoring and assessment efforts as scheduled in the SAPs.

Product: An average of 10 development/assessment phase projects (e.g. TMDLs) per year.

Milestone: This will be an ongoing effort. The development/assessment phase projects will be 1 -2 years in length and be initiated in March/April each year. -- March 1999, 2000, etc.

Task 5: Deliver technical assistance to local sponsors to summarize monitoring and assessment data and develop the reports identifying beneficial use impairments, sources and causes of NPS pollution, and watershed specific pollutant reduction targets (e.g. TMDL targets).

Product: An average of 10 watershed assessment reports per year.

Milestone: This is an ongoing effort. The first reports will be completed by December 1999.

Objective 3: Provide financial and technical assistance to local sponsors for the development and implementation of watershed projects addressing the highest priority Tier I waterbodies in each river basin.

Task 6: Based on watershed specific NPS assessment reports, assist local sponsors with the development of Tier I watershed project implementation plans (PIPs).

Product: 5-10 planning meetings per year; 3-7 watershed PIPs per year. The projected number of PIP's developed per year is based on historic Section 319 funding appropriations of \$100 million nationally and does not reflect the FY 1999 funding level of \$200 million. If Section 319 funding continues at the FY 1999 level of \$200 million or in the event additional financial support is received through state, federal, or local sources, the number of PIP's developed annually will likely increase. Through annual Task Force evaluations, this task as well as the others will be reviewed and adjusted accordingly to reflect any changes to the NPS Management Program's goals, objectives, and tasks resulting from increased financial and/or technical support.

Milestone: This is an ongoing effort. Draft PIPs will be completed by July and final PIPs by October of each year. -- July/October 1999, 2000, etc.

Task 7: Submit watershed PIPs to the NPS Task Force and Region VIII EPA for review and Section 319 funding approval.

Product: Section 319 funding for a minimum of 3-7 PIPs per year

Milestone: The NPS Task Force and EPA will conduct their reviews, annually, during the period of October - January

Task 8: Develop contractual agreements with local sponsors and provide guidance and technical assistance to implement and manage the watershed projects.

Product: A minimum of 3-7 new watershed project contracts per year; 5-10 Project Advisory Committee meetings per year; 3-7 training sessions per year on the management of Section 319 and local match funds; information on potential sources of financial assistance; weekly/monthly communication with sponsors or staff.

Milestone: Ongoing effort; Technical assistance for project management is provided, as needed, throughout the project period.

Objective 4: Expand sources of financial assistance for NPS pollution projects to reduce local sponsors' match responsibilities and/or the level of Section 319 assistance needed.

Task 9: Coordinate NPS Program efforts with local project sponsors, to determine current and future state/local match requirements for local NPS pollution management projects.

Product: Report summarizing the cumulative match commitments needed to support current and future NPS projects.

Milestone: October 1999

Task 10: Support a state general fund appropriation dedicated to providing cost-share assistance for local Section 319 projects.

Product: Biennial appropriations of state general funds to be used to match locally sponsored Section 319 projects.

Milestone: The state operates on a biennium which begins on July 1st of odd numbered years. Depending on legislative approval, state general funds could be available in July 2001.

Task 11: Establish a CWA SRF loan program to partially support locally sponsored NPS pollution management projects.

Product: SRF low interest loan program to support a portion of local NPS project match requirements.

Milestone: July 2000

Task 12: Develop and distribute a directory of potential local, state, federal, and private sources of financial assistance to project sponsors wanting to address water quality and/or NPS pollution.

Product: Financial Assistance Directory and/or information on government programs and private foundations or industries that offer financial assistance to local resource management projects.

Milestone: July 1999

Task 13: Strengthen and expand partnerships with various commodity groups (e.g. ND Stockman's Association, ND Wheat Growers), agricultural companies (e.g. Monsanto, Concord) and other private groups or organizations (e.g. Ducks Unlimited, Certified Crop Advisors) to increase the level of financial and technical assistance available to local NPS pollution projects.

Product: 2-5 meetings annually; direct mailings; "new" Task Force members and local project partners

Milestone: Ongoing effort; Will be initiated in October 1999.

Task 14: Assist Local Project Advisory Committees and/or Basin Management Committees with the solicitation of financial assistance from other local/state/federal programs and private foundations or companies to support local NPS pollution management efforts.

Product: Increased support and participation from a variety of state/federal/local resource management groups, private foundations, local businesses, etc.

Milestone: Ongoing effort; Completed annually as part of the PIP development and implementation activities

Objective 5: Maintain post-project NPS pollution management efforts and document long-term benefits of NPS pollution control and/or water quality improvement practices applied within the project areas.

Task 15: Provide financial and technical assistance to monitor/evaluate post-project water quality trends and maintenance of restored beneficial uses for three years following the completion of a project.

Product: Post-project data and reports summarizing trends and/or conditions within the project areas during the three year “post-project evaluation period” -- 1 - 2 reports/year

Milestone: First report -- October 2001

Task 16: Provide financial and technical assistance to local project sponsors to maintain post-project I/E efforts.

Product: Assistance for development and implementation of various I/E projects

Milestone: Ongoing effort; Initiated in October 1998.

VI. COORDINATION

Given the nature of NPS pollution management in the state, coordination with multiple agencies and organizations is essential to ensure sufficient financial resources and expertise are available to address local concerns. Currently, there are several federal, state, and local programs that can provide technical and/or financial assistance to local entities which want to address NPS pollution. Table 3 identifies these programs and the administering agencies.

Delivery of the NPS Program, both statewide and locally, takes a tremendous amount of coordination with other federal, state, and local agencies as well as private groups and landowners/producers. The NPS Program’s primary means for coordinating statewide efforts is through the North Dakota NPS Pollution Task Force (Task Force). Local coordination will be primarily accomplished through the Local Project Advisory Committees and Basin Management Committees.

The Task Force was developed to serve as a governing board to oversee and review the progress and development of the North Dakota NPS Pollution Management Program. This multi-agency board provides the expertise and appropriate guidance to ensure a balanced program is being implemented in North Dakota. The primary responsibilities of the Task Force involve: 1) interagency coordination; 2) NPS project review and approval; and 3) NPS Management Program evaluation. Through Task Force meetings, the opportunity or forum is provided for representatives from several state, federal and local agencies and private groups to discuss and comment on various interagency issues or programs (e.g. USDA Programs, assessment activities) related to resource management in the state. These meetings also offer the opportunity to review and comment on all NPS projects developed by Local Project Advisory and/or Basin Management Committees. Ultimately, the local projects seeking Section 319 financial assistance must receive Task Force approval before the PIPs are forwarded to EPA Region VIII for funding consideration. The Task Force also conducts periodic reviews of the NPS Management

Table 3. Federal, State, and Local Programs Which Directly or Indirectly Control NPS Pollution.

Program	Administering Agency			Program Area	Water Quality Effectiveness
	Local	State	Federal		
Resource Conservation & Development Fund	RC&D Council		NRCS	Statewide	Partially
Small Watershed Protection Project			NRCS	Local	Partially
Environmental Quality Incentive Program*			NRCS	Local	Partially
Wildlife Habitat Incentives Program*			NRCS	Local	Partially
Floodplain Easement Program*			NRCS	Local	Fully
Wetland Reserve Program*			NRCS	Local	Partially
Conservation Reserve Program*			FSA	Statewide	Partially
CWA Section 401 Water Quality Certification		Health Dept.	EPA	Local	Fully
CWA Section 104(b)(3)		Health Dept.	EPA	Statewide	Partially
CWA Section 106		Health Dept.	EPA	Statewide	Partially

Table 3. (cont.) Federal, State, and Local Programs Which Directly or Indirectly Control NPS Pollution

Program	Administering Agency			Program Area	Water Quality Effectiveness
	Local	State	Federal		
State Revolving Loan Fund					
CWA Sec. 603(2)(c)		Health Dept.	EPA	Statewide	Partially
CWA Sec. 604(b) Title VI		Health Dept.	EPA	Statewide	Partially
Private Lands Initiative		Game & Fish Dept.		Local	Partially
State Technician Grant Program	SCD	SSCC		Local	Partially
Water Education for Teachers (WET)		Water Commission		Statewide	Partially
Improving Water Quality for Human/Livestock Consumption		Extension Service		Statewide	Partially
Soil and Water Conservation		Extension Service		Statewide	Partially
Partners for		USFWS		Statewide	Partially

Wildlife*

Table 3. (cont.) Federal, State, and Local Programs Which Directly or Indirectly Control NPS Pollution

Program	Administering Agency			Program Area	Water Quality Effectiveness
	Local	State	Federal		
Pesticide Applicator		Ag. Dept.		Statewide	Partially
Chemigation Program		Ag. Dept.		Statewide	Partially
State Waterbank Program		Ag. Dept.		Statewide	Fully
ND Wetlands Trust	Wetlands Trust			Statewide	Partially
Ducks Unlimited Programs	Ducks Unlimited			Statewide	Partially

* Federal financial assistance and development programs

FSA - Farm Service Agency

NRCS - Natural Resources Conservation Service

SCD - Soil Conservation Districts

USFWS - U. S. Fish & Wildlife Service

SSCC - State Soil Conservation Committee

Program's progress toward short and long term goals and provides recommendations on all updates to the State's NPS Management Plan. Currently, the Task Force has 32 members from a variety of private organizations, and state, tribal, and federal agencies (Table 4). The mission statement for the NPS Task Force reads as follows:

“The North Dakota Nonpoint Source Pollution Task Force's mission is to provide leadership to local governments, private organizations, and the people of North Dakota in the protection of the state's surface and ground water resources where they are threatened or impaired due to nonpoint source pollution.”

The Task Force generally meets on a quarterly basis to address a variety of issues associated with the delivery and/or implementation of the NPS Management Program. One of the primary responsibilities of the Task Force is the annual review and prioritization of the Section 319 project proposals. This process involves two separate phases. The first phase of the process focuses on the review of draft PIPs to determine eligibility for Section 319 funding and also allows the Task Force the opportunity to provide comments on the PIPs to the local project sponsors. During the second phase of the process, the Task Force evaluates the benefits and appropriateness of each proposed project and assigns a numeric ranking to each project. Projects which the Task Force deems the most effective and appropriate during phase two, are approved and submitted to EPA Region VIII for Section 319 funding.

The Task Force also maintains a close working relationship with all USDA agencies in the state, particularly NRCS. Many of the agencies and organizations represented on the Task Force are also members of the NRCS State Technical Committee. Currently, all USDA water quality programs (particularly those in Section 319 project areas) are subject to input from the NPS Management Program and/or the Task Force.

The partnership between USDA agencies and the Task Force has been very beneficial for the state's NPS Pollution Management Program. Many of the state's Section 319 projects have been able to acquire various types of USDA funding (e.g. EQIP, CRP) because of the preferred status placed on these project areas by USDA policies. The combination of USDA and Section 319 funding in a project area generally enhances the overall effectiveness of the projects' efforts and helps the sponsors achieve their water quality improvement goals. To ensure the success of future Section 319 projects, the Task Force requests all potential project sponsors also seek assistance through the various USDA programs and/or other entities to complement funding provided through the Section 319 Program.

Local coordination and project development and implementation will primarily be accomplished through the formation of Local Project Advisory Committees and Basin Management Committees. Although these two groups will often have similar membership, each will have different roles and responsibilities for addressing local NPS pollution issues.

Table 4. Nonpoint Source Pollution Task Force Members.

Public/Private Organizations

Environmental and Energy Research Center	ND Association of RC&D Councils
ND Association of Soil Conservation Districts	ND Farm Bureau
ND Farmers Union	ND Grain Growers Association
ND Grazing Associations	ND Pork Producers
ND Rural Water Systems Association	ND Water Resource Districts
ND Water Users	ND Wildlife Federation
The International Coalition	

State Agencies

ND Department of Agriculture	ND Department of Health
ND Game and Fish Department	ND Geological Survey
ND Parks and Recreation Department	NDSU Agricultural Extension Service
NDSU Ag Extension Service--Soil Conservation Committee	ND Water Commission

Federal Agencies

USDA Agricultural Research Service	USDA Farm Services Agency
USDA Natural Resource Conservation Service	USDA Forest Service
USDA Rural Development	USDI Bureau of Land Management
USDI Bureau of Reclamation	USDI Fish & Wildlife Service
USDI Geological Survey	US EPA Region VIII

Tribal

Three Affiliated Tribes
Spirit Lake Tribe

Local Project Advisory Committees are the primary groups responsible for the “day-to-day” management and implementation of locally sponsored NPS projects. Their responsibilities will include: 1) PIP development; 2) project staff management; 3) project administration; 4) local project evaluation; 5) delivery of technical and financial assistance to cooperating landowners and producers; 6) local public educational events; and 7) financial support for the of project. In most situations the Project Advisory Committee will also be a member of the Basin Management Committee in their area. Membership on the Advisory Committee will be dependant on a number of factors, such as the NPS issues being addressed and size of the project area, however, “core”

members will generally include soil conservation districts and water resource boards within the boundaries of the project area.

In order to expand and efficiently implement the state NPS Management Program, the Task Force has recommended the formation of a Basin Management Committee in a minimum of each of the six major river basins in the state (Figure 1.). The primary function of the Basin Management Committees (Basin Committees) will be the development of basin-wide priorities to provide direction for local NPS pollution management initiatives. Responsibilities of the Basin Committees will involve: 1) identification of basin-wide NPS pollution concerns; 2) delineation of subwatersheds in their basin; 3) development of Tier I, II, and III prioritization criteria for subwatersheds in the basin; 4) prioritization of Tier I, II, and III watersheds in the basin; 5) basin-wide and/or subwatershed assessment efforts; 6) public out-reach and education; and 7) coordination between local NPS projects and associated Project Advisory Committees. The “core” members on the Basin Committees will typically include soil conservation districts, water resource boards, city councils, county commissions, Local Project Advisory Committees, and state/federal agencies or private organizations with natural resource management responsibilities in the basin.

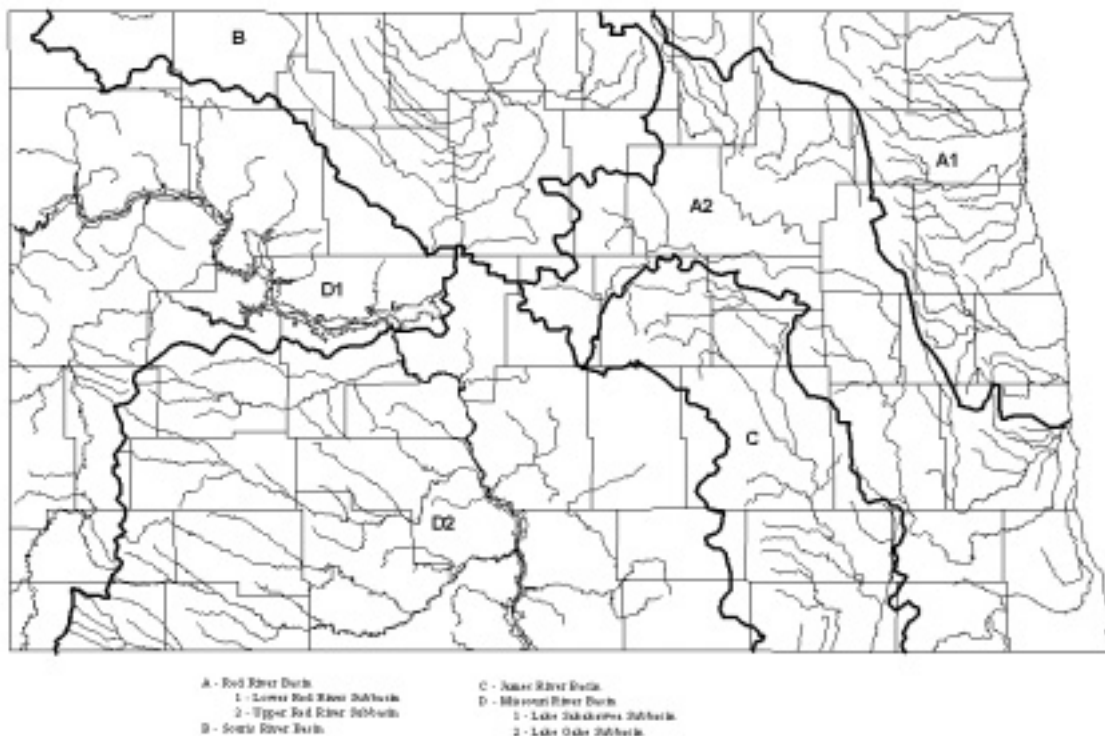


Figure 1. Major Hydrologic Basins in North Dakota.

To enhance coordination between local Section 319 NPS pollution projects and federal and state agencies and private organizations, the NPS Management Program sponsors an annual workshop for the local watershed coordinators and project sponsors. This workshop provides a forum for watershed project sponsors to discuss their experiences with the coordination and management of their respective projects and exchange information on any successes or failures within the project areas. It also provides a forum to discuss and/or review updates to the NPS Pollution Management Plan, BMP Cost-Share Guidelines, or other NPS Management Program guidance. The workshop also includes open discussions on data collection and interpretation, farm unit planning, state and federal environmental regulations, and other issues that might impact local NPS pollution projects. More importantly, the annual workshops provide project sponsors and staff and NPS Management Program personnel an opportunity to meet representatives from various private groups or state/federal agencies that can provide financial and/or technical assistance to NPS pollution projects.

COORDINATION NEEDS

The formation of partnerships and coordination with those partners are essential components of any successful NPS pollution management project or program. To ensure continued success within the NPS Management Program, the Task Force recognizes the need to maintain existing partnerships and increase the level of “stakeholder” involvement during the development and implementation of future NPS projects. This coordination needs to be accomplished at both the state and local levels by providing the necessary assistance to enhance or strengthen partnerships between the NPS Management Program; local project sponsors; various local; state; and federal agencies; private organizations; and industry.

As previously stated, the Task Force serves as the primary means for accomplishing coordination between the NPS Management Program and other state/federal agencies or private organizations. Through the Task Force, the NPS Management Program has been able to form partnerships with many of the agencies and organizations represented on the Task Force. These state level partnerships will need to be expanded and strengthened to increase the availability of assistance and expertise from other agencies or organizations during the development and implementation of state and local NPS pollution projects.

The NPS Management Program will also need to participate in consistency review processes or meetings with federal partners (e.g. NRCS, USFS) concerning the delivery of federal assistance and/or project development programs within priority waterbodies/watersheds identified in the state NPS Pollution Management Plan. Federal programs or projects that may be targeted for consistency reviews include CRP, EQIP, PL566 Small Watershed Program, Stewardship Incentive Program, and Section 404 permits. To address these needs, current interaction and communication with federal agencies such as the U.S. Fish and Wildlife Service (USFWS), Bureau of Reclamation, Natural Resource Conservation Service, U. S. Forest Service (USFS), and Bureau of Land Management (BLM) must be maintained and expanded to ensure federal programs and projects in the state are consistent with the goals and objectives of the NPS

Pollution Management Program. Expanded efforts will also need to be initiated to strengthen relationships with federal land managers (e.g. USFWS, USFS, BLM) in the state to establish a consistent review process for federal projects on public lands within the impaired or threatened watersheds. Partnerships with state agencies, such as the NDSU Extension Service, N. D. Agriculture Department, State Water Commission, and N. D. Game and Fish Department will also need to be maintained to increase the amount of technical and financial assistance available to local NPS assessment and implementation projects.

Coordination at the local level will need to focus on the development of partnerships with private organizations and local, state, and federal agencies that have resource management responsibilities and/or interests within the priority watersheds or project areas. During the early stages of project development, the NPS Management Program will need to provide increased assistance to help establish these partnerships through the formation of Local Project Advisory Committees and Basin Management Committees. These committees will generally be comprised of representatives from soil conservation districts, water resource boards, and county commissions. The Local Project Advisory Committees will serve as the lead sponsors of local watershed projects and be responsible for local project development and management. Basin Management Committees will be established to assist with the prioritization of subwatersheds and coordination of NPS pollution management efforts throughout each major river basin. Both committees will provide a network to increase local involvement in NPS project prioritization, development, and management as well as provide the mechanism to strengthen partnerships with local, federal, and state agencies and private organizations.

One of the primary benefits of the Local Project Advisory and Basin Management Committees will be the development of partnerships that are based on watershed or basin boundaries rather than political subdivisions. Historically, the state's water resources have been managed according to political boundaries. This approach for managing the state's water resources has occasionally limited the effectiveness of water quality improvement efforts within watersheds that cross political lines. These limitations have generally been due to differences between local resource management goals and the potential financial responsibilities of each county or resource management board. Through the formation of committees based on watershed or basin boundaries, these limitations can be addressed more easily and a more coordinated effort can be initiated to identify and address priority concerns throughout the State's river basins and/or subwatersheds.

The NPS Task Force identified the following goal, objectives, and tasks associated with coordination between the NPS Management Program, local sponsors, local, state, and federal agencies, and private organizations.

Coordination Goal: Increase the effectiveness of NPS pollution management in the state by coordinating project development and implementation efforts with local, state, and federal agencies and private organizations involved with natural resource management in the state.

Objective 1: Expand local participation in the prioritization, development, and implementation of NPS pollution management projects

Task 1: Develop and distribute information to assist local resource managers with the formation partnerships.

Product: State Directory identifying agencies and organizations that can provide assistance for NPS project development and implementation - 200 copies

Milestone: August 1999

Task 2: Coordinate the formation of “Basin Management Committees” to facilitate the prioritization, development, and implementation of NPS pollution management projects in the state’s six major river basins.

Product: A minimum of six Basin Management Committees; Participate in 6-12 meetings per year

Milestone: November 1999 through October 2001

Task 3: Assist with the development of Local Project Advisory Committees and participate in their meetings.

Product: 3-7 “new” Local Project Advisory Committees established per year; Participate in 2-3 Advisory Committee meetings per project per year.

Milestone: This will be an ongoing effort; The “new” Advisory Committees will be established during the development of the project plans

Objective 2: Maintain partnerships and communication with the appropriate local, state, and federal agencies, and private organizations to coordinate resources and ensure other natural resource management efforts are consistent with the state’s NPS pollution management goals.

Task 4: Obtain input from the Task Force during the development of projects and update its members, regularly, on NPS Management Program and local NPS project activities.

Product: 4-5 Task Force meetings per year

Milestone: Annual Schedule --- Draft PIP review in July; Project area tours in August; Final PIP review in October; Local project updates/presentations in February

Task 5: Participate in interagency meetings addressing the delivery of other state and federal natural resource management programs that may affect NPS pollution management or beneficial uses of the state's water resources.

Product: Annual meetings --- 5-6 NRCS State Technical Committee meetings; 2 NDASCD Water Resources Standing Committee meetings; 4 NRCS Interagency Watershed Committee meetings; 6 Red River Basin Board meetings; and 4 Pembina River Watershed Advisory Board meetings

Milestone: This will be an ongoing effort

Task 6: Utilize the Task Force to disseminate information to other state and federal agencies to keep them updated on NPS pollution management goals and objectives and priorities within the state.

Product: Materials to be distributed to Task Force members --- Updated NPS Pollution Management Plan and Waterbody Priority List; Unified Watershed Assessment Report; Updated Section 303(d) Waterbody List; and Section 305(b) Reports.

Milestone: This will be an ongoing effort. Distribution of the materials will be initiated in January 1999

Task 7: In cooperation with federal land managers (e.g. USFWS, USFS, BLM) in the state, establish a process for conducting consistency reviews of federal projects and programs on public lands within the watersheds of impaired and/or threatened waterbodies.

Product: Consistency review process which includes at a minimum; review criteria, designated contacts, identification of impaired or threatened waterbodies and guidelines for addressing inconsistencies.

Milestone: Completion date for the process is October 2001

VII. INFORMATION AND EDUCATION

Information and education (I/E) was recognized during the early stages of the state's NPS Pollution Management Program history as a high program priority. While watershed projects are effective at abating known sources and causes of NPS pollution, the I/E program and projects are the primary means for addressing new NPS pollution threats to water quality, whether they result from new or expanding activities. Because of the proactive nature of I/E activities and the high program priority status, the NPS Task Force established an I/E subcommittee to assist NPS Management Program personnel with the development of a strategy and workplan specifically addressing the delivery of the NPS Program's I/E efforts. The I/E subcommittee completed the development of the NPS Management Program Information and Education Strategy in 1993. This strategy was updated in 1998 and included as Appendix 8.

The I/E strategy identifies the information and education needs for the NPS Management Program and establishes goals and objectives to provide direction for the implementation of state and local I/E activities. The strategy also establishes a prioritization process for evaluating state and local I/E project proposals. Priority categories include: 1) immediate action projects; 2) continuing activity projects; and 3) as resources permit projects. The I/E strategy and project categories are reviewed annually by the I/E subcommittee to evaluate progress and identify any needed updates.

VIII. PROGRAM EVALUATION

Program success will ultimately be measured in terms of miles of streams or acres of lakes or wetlands which are restored and/or protected for the benefit of future generations. Currently, there are a number of mechanisms in place which will be used to monitor and evaluate the NPS Management Program's success as it relates to restoration and protection of the beneficial uses of the state's surface and ground water resources. The primary tools for evaluating long-term trends and conditions of the state's surface water resources will be the biennial Water Quality Assessment Reports (i.e. Section 305(b) Reports) and the NPS Assessment Reports. These reports will be used by the Task Force and NPS Management Program to determine progress toward the Program's 15-year goal. Local monitoring efforts, annual and semiannual project reports, and watershed specific assessment reports (e.g. TMDL reports) will also be used to evaluate progress toward short-term goals as well as the success of local watershed initiatives. The water quality of many of the state's aquifers will also continue to be monitored by NDDH staff on an annual basis. This information, which is compiled in annual and five-year reports, will be used to evaluate water quality trends in the state's aquifers

Annual Task Force reviews will be the primary means for evaluating the effectiveness of NPS Management Program delivery within the state. The main focus of these annual reviews will be on the products and milestones identified in the NPS Pollution Management Plan and annual program reports. As a secondary component of the annual evaluations, the Task Force will also review changes in resource management practices and priorities in the state. This part of the review process will allow the opportunity to determine if the NPS Management Program Plan needs to be revised to effectively address future potential NPS pollution threats associated with new or changing resource management practices. While it is difficult to predict what these new NPS pollution threats or resource management issues may be, a majority of the state's NPS pollution management efforts will continue to be focused on agriculture. Current trends in the agricultural industry indicate future agricultural NPS pollution threats may be associated with larger farming operations, increased irrigated acreage, new crop rotations, and larger livestock concentration areas. In addition, increased assistance may need to be directed toward urban and riparian areas in the future due to increased urban expansion and increased public awareness of the relationship between water quality and riparian management.

Annual NPS pollution project sponsor and staff workshops will also provide an opportunity to gain a local perspective on the success of NPS Management Program delivery. Through these workshops, local sponsors or resource managers provide feedback on what can be done to

improve the delivery of NPS Management Program financial and technical assistance at both the state and local level.

Individual watershed projects will be evaluated annually to track specific task accomplishments. The project goals and objectives will be also evaluated through the implementation of project specific sampling and analysis plans (SAPs). During the development of project implementation plans (PIPs), NPS Management Program personnel will assist local sponsors with the development of project-specific SAPs. Monitoring efforts described in the SAPs will be designed to evaluate the project's progression toward the landuse and water quality goals and objectives identified in the PIPs. Semiannual and annual project reports will also be used to evaluate the success of local projects. This information is entered into the Grants Reporting and Tracking System (GRTS) to update EPA on the progress of local projects as well as the NPS Management Program.

To more effectively measure the success of the state's NPS pollution management efforts, expanded monitoring and assessment efforts will be initiated to better evaluate delivery of NPS Management Program assistance as well as the success of local watershed projects. Given the dynamic nature of NPS pollution issues, factors such as, climate, economics, and farm program policies, can and do significantly alter NPS pollution priorities in the state. To account for these ever changing factors, the NPS Management Program will also need to track and evaluate changes in statewide or local program priorities and be able to respond to new or expanding NPS pollution threats to water quality.

The NPS Pollution Task Force identified the following goal, objectives, and tasks relative to NPS Management Program evaluation.

Evaluation Goal: Evaluate the successes and failures of the NPS Management Program and identify the necessary updates to the NPS Pollution Management Program to maintain successful delivery of financial and technical assistance to local and state agencies and private organizations addressing NPS pollution.

Objective 1: Assess and document beneficial use impairments in the state's surface and ground water resources resulting from NPS pollution and, to the extent possible, identify current and future sources and causes of the use impairments or threats.

Task 1: Utilize the most current data and information to update the NPS Assessment Report and biennial Water Quality Assessment Report (i.e. Section 305(b) Report).

Product: Updates to the NPS Assessment Report every five years and biennial updates to the Section 305(b) Report.

Milestone: April 2000, 2002, etc. for the biennial Section 305(b) Report; October 1999, 2004, etc. for the NPS Assessment Report

Objective 2: Maintain effective delivery of the NPS Program by conducting periodic reviews of Program accomplishments.

Task 2: Develop a process for the Task Force to utilize to evaluate NPS Management Program accomplishments.

Product: Task Force evaluation worksheets based on the goals, objectives, and tasks identified in the updated NPS Pollution Management Plan.

Milestone: September 1999

Task 3: Establish annual performance measures for NPS Management Program staff which are based on the goals, objectives, and tasks identified in the updated NPS Pollution Management Plan and NPS Pollution Management Base Program Workplan. The current NPS Pollution Management Base Program Workplan is provided in Appendix 9.

Product: Annual performance measures for NPS Management Program Staff

Milestone: July 1999, 2000, 2001, etc.

Task 4: Provide the appropriate information to the Task Force to complete annual reviews of NPS Management Program progress related to identified goals, objectives, and tasks.

Product: Annual reports to the Task Force on specific Program accomplishments; Annual GRTS updates on the Program; Task Force evaluation of the Program and recommendations for updates.

Milestone: Annual Task Force reports, review, and update recommendations - January; Annual GRTS updates - March/November; The first Task Force review of the NPS Management Program will occur in January 2000; The first GRTS updates based on the updated NPS Pollution Management Plan will be completed in November 1999.

Task 5: Distribute the appropriate information and assessment data on future NPS pollution threats to the Task Force to obtain their recommendations on NPS Management Program Plan revisions needed to address any new threats to water quality.

Product: Annual Task Force reviews of available information on resource management changes occurring in the state and the potential future NPS pollution threats associated with the changes. Task Force recommendations on NPS Management Program Plan updates or revisions.

Milestone: Annual Task Force reviews and update recommendations - January; The first Task Force review of the NPS Management Program will occur in January 2000.

Task 6: Solicit feedback from local project sponsors regarding delivery of NPS Program assistance.

Product: Comments and recommendations through discussions during annual project sponsor and staff workshop.

Milestone: March 1999, 2000, 2001, etc.

Task 7: Update the NPS Pollution Management Program Plan every five years.

Product: Management Plan updates every five years; Minor updates may also be needed more frequently to accommodate Task Force recommendations and local feedback

Milestone: October 1999, 2004, 2009, etc.

Objective 3: Evaluate local NPS project progress toward goals identified in the PIP's

Task 8: Maintain an annual reporting schedule for local NPS Projects.

Product: Semiannual and annual reports on project status and specific task accomplishments. -- 30 - 40 semiannual and annual project reports per year.

Milestone: Semiannual reports are due in March; Annual reports are due in November.

Task 9: Review and summarize water quality and landuse data collected according to project-specific SAPs within the watershed project areas to define pre-project conditions and evaluate progress in meeting project goals and objectives at the end of the project period and beyond.

Product: For each project --- Report on baseline water quality and beneficial use conditions and a final report assessing the water quality and beneficial use improvements related to project activities. The number of reports annually will be dependant on project start-ups and completions.

Milestone: The schedule for completing reports for each project will be identified in the milestones of each project's SAP and/or PIP.

Task 10: Provide annual and semiannual updates on local project progress to EPA Region VIII.

Product: Semiannual and annual updates to the GRTS

Milestone: Semiannual report in March; Annual report in November

IX. NINE KEY ELEMENTS OF THE ND NPS PROGRAM

The recently released FY97 Program Guidance from EPA identifies nine key elements of an effective state NPS Pollution Management Program, and requires states to revise and submit updated NPS Program Management Plans addressing these elements. This section summarizes where and how the nine key elements have been addressed in the updated NPS Pollution Management Program Plan. Each element is stated in bold, followed by applicable discussion.

1. The state program contains explicit short and long term goals, objectives and strategies to protect surface and ground water.

The State's mission statement and long-term goal for the NPS Management Program is found in the Introduction of the Plan, and is consistent with the national goal established in the Clean Water Act. The State NPS Management Plan has six sections that identify specific short and long term goals, objectives, and tasks. These sections are: section III - Resource Assessment; section IV - Prioritization; section V - Assistance; section VI - Coordination; section VII - Information/Education; and section VIII - Program Evaluation. Each section also contains specific milestones and products to allow the evaluation of progress toward the Program's short and long term goals .

2. The state strengthens its working partnerships and linkages to appropriate state, interstate, Tribal, regional, and local entities (including conservation districts), private sector groups, citizen groups, and Federal agencies.

The Coordination Section of the Plan addresses this element in detail. The current working partnerships between appropriate state, interstate, Tribal and federal agencies are accomplished through the NPS Task Force. Numerous regional/local entities, private sector groups, citizen groups, and conservation districts are also active in the NPS Management Program through the NPS Task Force and/or sponsorship of local NPS projects. However, there is a recognized need to strengthen local working partnerships, and that is reflected in the goal to establish Basin Management Committees and Local Project Advisory Committees across the state. Local committees such as these would be extremely effective in identifying local priorities and coordinating NPS Management Program assistance to address identified NPS pollution concerns and evaluate the benefits of pollution abatement efforts.

3. The state uses a balanced approach that emphasizes both state-wide nonpoint source programs and on-the-ground management of individual watersheds where waters are impaired or threatened.

This element is addressed throughout the Plan, particularly in sections III through VIII. In each of these sections there is information and/or objectives and tasks describing state and local efforts that will be initiated to address NPS pollution impacts to the state's surface and ground water resources. As in the past, a majority of the NPS Management Program's activities will involve coordination with local resource managers and be directed toward the development and implementation of local projects addressing identified NPS pollution concerns.

Currently, approximately eighty percent of the NPS Management Program's Section 319 funds are used to support local NPS pollution assessment, information/education, and watershed projects. As the Basin Management Committees and Local Project Advisory Committees are established across the state, the level of local participation in the assessment and prioritization of the state's waterbodies/watersheds and management of NPS pollution projects is expected to increase significantly. Formation of these Basin Management or Project Advisory Committees will also provide the opportunity for the Task Force to gain more local input and assistance to assess and prioritize waterbodies within the state's major river basins. Delivery of state and locally sponsored I/E programs will also be more effective when coordinated with these local committees.

4. The state program (a) abates known water quality impairments from nonpoint source pollution and (b) prevents significant threats to water quality from present and future nonpoint source activities.

Section III addresses current NPS pollution threats and Section VIII contains information on steps that will be taken to address future NPS pollution threats. Voluntary implementation of best management practices (BMPs) and public education are the primary means used by the NPS Management Program to abate and/or prevent water quality and/or beneficial use impairments caused by NPS pollution. Section VII and Appendix 8 describe the NPS Management Program's I/E efforts to abate and prevent NPS pollution in the state. The NPS Management Program's

guidelines for the implementation of approved BMPs are provided in Appendix 7. Specific BMPs which are applied within a particular watershed will be dependant on the sources and causes of NPS pollution and landowner acceptance of the proposed BMPs. Public education and one-on-one technical assistance are the most effective ways to gain landowner acceptance as well as public support for watershed projects. In the event water quality impairments are a result of activities regulated by another program or agency, NPS Management Program staff will coordinate with these agencies to see the action is abated or the threat is prevented.

5. The state program identifies waters and their watersheds impaired by nonpoint source pollution and identifies important unimpaired waters that are threatened or otherwise at risk. Further, the state establishes a process to progressively address these identified waters by conducting more detailed watershed assessments and developing watershed implementation plans, and then by implementing the plans.

As stated in the Assessment Section of the Plan, various assessment efforts [e.g. Section 305(b), Section 303(d), NPS Assessment report, the groundwater monitoring program] identify impaired waters in the state. Waterbodies are then prioritized as presented under the Prioritization Section of the Plan. Finally, as noted in the Assistance Section of the Plan, the actual NPS pollution projects proceed through the development phase to the watershed phase. Specific goals, objectives, and tasks are provided in the Assessment, Prioritization, and Assistance Sections of the Plan. The reports supporting the assessment and prioritization processes are also provided in the Appendices.

6. The state reviews, upgrades, and implements all program components required by Section 319(b) of the Clean Water Act, and establishes flexible, targeted and iterative approaches to achieve and maintain beneficial uses of water as expeditiously as practicable. The state programs include:

- > A mix of water quality based and/or technology based programs designed to achieve and maintain beneficial uses of water; and**
- > A mix of regulatory, non-regulatory, financial and technical assistance as needed to achieve and maintain beneficial uses of water as expeditiously as practicable.**

(a) Sections III and IV discuss the NPS Management Program's efforts associated with the assessment and prioritization of waterbodies with beneficial use impairments due to NPS pollution. Section V describes the delivery of financial and technical assistance for addressing identified use impairments. BMPs approved for NPS pollution management are listed in

Appendix 7. Section VIII identifies state and local efforts for evaluating beneficial use improvements.

(b) There are currently numerous local/state/federal programs that provide assistance for reducing and/or preventing nonpoint sources pollution in the state. These programs are identified under the Coordination Section of the Plan.

(c) Milestones for specific NPS Management Program tasks are listed in Sections III through VIII.

(d) Specific tasks related to NPS Management Program updates are provided in Section VIII.

7. The state identifies Federal lands and activities that are not managed consistently with state nonpoint source program objectives. Where appropriate, the state seeks EPA assistance to help resolve issues.

The NDDH, including NPS Management Program staff, regularly review information (e.g EIS, program policies) on other state and federal programs or projects to evaluate consistency with NPS Management Program goals and objectives. The state also has active working relationships with federal agencies which administer federal lands in the state. The Coordination section builds on this experience by describing specific objectives and tasks that will be initiated to ensure other state/federal lands and programs are managed consistently with the state's NPS pollution management goals and objectives.

8. The state manages and implements its nonpoint source program efficiently and effectively, including necessary financial management.

The NPS Management Program recognizes that effective and efficient program management and delivery must involve a coordinated effort to assess state and local NPS pollution management needs and implement projects and programs to address those needs. Each section of the Plan includes objectives and tasks that are related to the implementation of the NPS Management Program.

The NPS Management Program and the NDDH Division of Accounting use EPA-approved programmatic and financial accounting systems to track the expenditure of Section 319, state, and local funds committed for NPS pollution management in the state. Annual contractual agreements are used to identify state and local financial commitments and responsibilities as they relate to the implementation of NPS projects. The financial expenditures of local sponsorships are reviewed on a monthly or quarterly basis. Specific objectives and tasks related to financial management are described in the Evaluation and Assistance sections.

9. The state periodically reviews and evaluates its nonpoint source management program using environmental and functional measures of success, and revises its nonpoint source assessment and its management program at least every five years.

Objectives and tasks related to the review and update of the NPS Pollution Management Plan and Assessment Report are provided in section VIII. Updates to the NPS Pollution Management Plan and Assessment Report will occur at least every five years. It is anticipated, however, that more frequent updates to these reports will be needed to accommodate feedback from the Task Force, Basin Management Committees, and Local Project Advisory Committees.